

**DRAFT**

**COMMONWEALTH OF MASSACHUSETTS**

.....,SS

[[COURT]]  
Docket No. .....

**COMMONWEALTH**

v.

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**AFFIDAVIT IN SUPPORT OF COMMONWEALTH'S MOTION TO ALLOW  
EXPERT TESTIMONY ON COCAINE**

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**AFFIDAVIT OF MELISSA C. O'MEARA**

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I, Melissa C. O'Meara, do hereby depose and state the following:

1. I am employed as a chemist at the Department of State Police Forensic Services Group, Crime Laboratory System, Forensic Chemistry Section (Crime Laboratory) located at 59 Horse Pond Road in Sudbury, Massachusetts.
2. My duties in the Drug Unit at the Crime Laboratory include testing evidence submitted by law enforcement agencies in Massachusetts to determine the presence or absence of controlled substances and technically reviewing completed case work files of other Drug Unit analysts.
3. I have a degree in a natural/physical science. See Exhibit A. Curriculum Vitae.
4. I have completed a documented training program. The training program included oral examinations; analysis of unknown materials and known standards; and verification testing of my competency. My training also included utilization and familiarization of all protocols used to examine drug cases submitted to the laboratory.
5. I am familiar with the Recommendations of the Scientific Working Group for the Analysis of Seized Drugs (SWGDRUG). SWGDRUG is comprised of a committee of prominent forensic scientists from around the world. SWGDRUG recommends the minimum standards to be met for the forensic identification of commonly seized drugs.

6. The protocols in place at the Drug Unit meet or exceed all SWGDRUG recommendations. See Exhibit B- SWGDRUG Recommendations, Exhibit C- MSP Drug Unit's Compliance with SWGDRUG Recommendations, and Exhibit D- MSP Drug Unit Protocols (CD Format).
7. After individual cases involving substances that are believed to be cocaine are processed by the Evidence Control Unit, the Drug Unit supervisors then assign the cases to a Drug Unit analyst. When the analyst is ready to test the submission, she makes a visual observation of the substance to ensure that the evidence seal is intact and that the substance has not been tampered with. The sample is re-weighed in accordance with protocol. See Exhibit D. She then unseals the bag(s) and begins testing the submitted substance.
8. The analyst conducts one or more of the following tests on the submitted evidence: mass spectrometry, infrared spectroscopy, gas chromatography, and ultra violet spectroscopy. Color tests may also be conducted. The data generated by the tests is then printed out and must be interpreted by the drug analyst.
9. After all the tests are concluded, the analyst who conducted the test(s) interprets the test results and reaches an opinion as to the composition of the substance. The opinion is included in a "report," which is then formally prepared in the form of a "certificate of analysis." At this point, the testing is complete. The file includes the inventory forms, the analyst's notes, all the underlying data printouts from the various tests and the certificate of analysis.
10. All completed case work files must be technically reviewed by a qualified technical reviewer prior to the release of a certified of analysis. I am qualified to perform technical reviews on completed case work files in the Drug Unit. Technical review of case work files is an essential component of the Crime Laboratory's quality assurance program and is an accreditation requirement of the American Society of Crime Laboratory Directors Laboratory Accreditation Board, ASCLD-LAB. The Drug Unit as well as the entire Forensic Services Group is accredited by ASCLD-LAB Legacy program.
11. A technical reviewer is required to have sufficient expertise gained through training and experiences in the discipline of drug analysis. Technical review requires the individual to review all items in the case work file including all data printouts generated by the testing completed in Category A, B and C of SWGSDRUG's recommendations. See Exhibits B and C.
12. As a technical reviewer, I can review any completed case work file from the Crime Laboratory Drug Unit and my training, knowledge and experience with drug testing will allow me to determine what methods were used, what tests were conducted and what type of substance(s) the testing identified. Thus, although I was not the analyst who performed the drug testing in the above referenced case, I can review the generated data printouts and determine what drug or drugs have been identified by each testing method. As a technical reviewer, I do not need to consult the original analyst's certificate of analysis to make this determination. Instead, I am able to form

my own opinion as to the composition of the substance(s) by reviewing the generated data printouts.

13. [[The following information would be case specific.]] I have reviewed the **Mass spectrometry**, Exhibit E. The data printout indicates the presence of cocaine.
14. I have reviewed the **infrared spectrum**, Exhibit F. The data printout indicates the presence of cocaine.
15. I have reviewed the **gas chromatograph**, Exhibit G. The data printout indicates the presence of cocaine.
16. I have reviewed the **ultra violet spectrophotometry** data printout, Exhibit H. The data printout indicates the presence of cocaine.

Signed under the pains and penalties of perjury before me on this \_\_\_\_\_ day of [[MONTH]], 2009.

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Melissa C. O'Meara